AR TA Assays Using Yeast Cells

Reference	Gaido et al. (1997)	Moffat et al. (2001)
Characteristics of Yeast		
Species	S. cerevisiae	S. cerevisiae
Strain	YPH500	n.p.
Transfection of Cells with Plasmids		
Stable or transient transection	Stable	Stable
AR expression vector	CUP1-Met hAR	hAR
AR source	human	human
Reporter vector	ARE- gal	lacZ
Endpoint measured	-galactosidase activity	-galactosidase activity
Plasmid transfected for cell toxicity	none	none
Endpoint measured for cell toxicity	n.a.	n.a.
Plating time prior to treatment with test substance	Cultured overnight, then grown to early-mid log phase	n.p.
Transcriptional activation assay		-
Test substance solvent	n.p.	Ethanol
No. of replicates	n.p.	n.p.
No. of times assay repeated	3 to 5	n.p.
Test substance incubation time	overnight	2 days
Agonism assay		
Reference ligand	5 -Dihydrotestosterone	5 -Dihydrotestosterone
Final concentration of reference ligand	n.p.	n.p.
Antagonism assay		
Reference ligand	n.a.	5 -Dihydrotestosterone
Final concentration of reference ligand	n.a.	.005 μΜ

Abbreviations: n.a. = not applicable;

n.p. = not provided

AR TA Assays Using Yeast Cells

October 2002

Reference	O'Connor et al. (1998)	O'Connor et al. (1999)
Characteristics of Yeast		
Species	S. cerevisiae	S. cerevisiae
Strain	YPH500	YPH500
Transfection of Cells with Plasmids		
Stable or transient transection	Stable	Stable
AR expression vector	CUP1-Met hAR	CUP1-Met hAR
AR source	human	human
Reporter vector	n.p.	n.p.
Endpoint measured	-galactosidase activity	-galactosidase activity
Plasmid transfected for cell toxicity	none	none
Endpoint measured for cell toxicity	n.a.	n.a.
Plating time prior to treatment with test substance	overnight	overnight
Transcriptional activation assay		
Test substance solvent	Methanol	Methanol
No. of replicates	3	3
No. of times assay repeated	n.p.	n.p.
Test substance incubation time	3 hours	3 hours
Agonism assay		
Reference ligand	5 -Dihydrotestosterone	5 -Dihydrotestosterone
Final concentration of reference ligand	n.p.	n.p.
Antagonism assay		
Reference ligand	5 -Dihydrotestosterone	5 -Dihydrotestosterone
Final concentration of reference ligand	n.p.	n.p.

Abbreviations: n.a. = not applicable;

n.p. = not provided

AR TA Assays Using Yeast Cells

October 2002

Reference	O'Connor et al. (2000)
Characteristics of Yeast	
Species	S. cerevisiae
Strain	YPH500
Transfection of Cells with Plasmids	
Stable or transient transection	Stable
AR expression vector	CUP1-Met hAR
AR source	human
Reporter vector	n.p.
Endpoint measured	-galactosidase activity
Plasmid transfected for cell toxicity	none
Endpoint measured for cell toxicity	n.a.
Plating time prior to treatment with test substance	overnight
Transcriptional activation assay	o v or migne
Test substance solvent	Methanol
No. of replicates	3
No. of times assay repeated	n.p.
Test substance incubation time	3 hours
Agonism assay	
Reference ligand	5 -Dihydrotestosterone
Final concentration of reference ligand	n.p.
Antagonism assay	
Reference ligand	5 -Dihydrotestosterone
Final concentration of reference ligand	n.p.

Abbreviations: n.a. = not applicable;

n.p. = not provided